RHODORA, Vol. 93, No. 875, pp. 299–300, 1991

NEW ENGLAND NOTE

DISCOVERY OF *EUPATORIUM LEUCOLEPIS* VAR. *NOVAEANGLIAE* IN BARNSTABLE COUNTY, MASSACHUSETTS

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ABSTRACT

In 1989, *Eupatorium leucolepis* var. *novaeangliae* was discovered growing on the northeast shoreline of North (Big) Hog pond in Sandwich, Barnstable County, Massachusetts. This record is the first for the species in Barnstable County, and represents the easternmost site in its range.

Key Words: *Eupatorium leucolepis* var. *novaeangliae,* endemic, endangered, coastal plain kettle pondshores, Barnstable County, Massachusetts

In August 1989, *Eupatorium leucolepis* (DC.) T. & G. var. *novaeangliae* Fern., New England boneset, was discovered by the writer along the upper margin of the northeast shore of North (sometimes known as "Big") Hog Pond in Sandwich, Massachusetts. Specimens are deposited with the Massachusetts Natural Heritage and Endangered Species Program in Boston and at NEBC.

This discovery represents the first documented occurrence of the species in Barnstable County and is an eastern range extension. Previously, it was restricted to fifteen stations in Plymouth County, Massachusetts and Washington and Newport Counties in Rhode Island. It is endemic to southern New England and is listed as Endangered by the Massachusetts Natural Heritage and Endangered Species Program; it is also a candidate for federal listing under the Endangered Species Act (B. A. Sorrie, pers. comm.).

New England boneset or thoroughwort is a stiffly erect member of the Asteraceae, standing .5–1.3 m in height. The sessile leaves are narrow (.8–2 cm) and sharply toothed, with a pilose undersurface; flowers occur in flat-topped corymbs with three to seven whitish flowers in each head. It differs from *Eupatorium leucolepis* var. *leucolepis* in its more northerly range and in having much broader and more sharply toothed leaves which taper to an acute tip (Crow, 1982). The variety is illustrated on the cover of *Rhodora,* Vol. 90, 1988.

Eupatorium leucolepis var. *novaeangliae* grows in the uppermost shore margins of coastal plain kettle ponds, where it is

adapted to the sandy, gravelly-peaty soils found abutting and underlying these nutrient-poor, acidic bodies of water. Depending on the fluctuating water table, this and associated kettle-pond species may flourish during periods of low water or may lie dormant or grow vegetatively without flowering during high water years (MNHESP, 1988). This sporadic dormancy/flowering periodicity may account for such a large population as the one reported here going unnoticed for so long.

A population of 220 stems was located at the Hog Pond station in 1989, with a slight increase to 225 found in August of 1990. Associated species found with the Hog Pond colony included *Eupatorium perfoliatum* L., *Rhexia virginica* L., *Solidago tenuifolia* Pursh, *Coreopsis rosea* Nutt., *Gratiola aurea* Muhl., *Crotalaria sagittalis* L., *Polygonum puritanorum* Fern. and *Linum intercursum* Bickn.

New England thoroughwort's habitat has been impacted in recent years by pondshore development, septic system leachate with concomitant nutrient loading, and off-road recreational vehicle rutting. Four historical locations apparently have been extirpated due to habitat destruction, and a fifth, the type station in Lakeville, Plymouth County, Massachusetts, nearly so (Crow, 1982; Sorrie, 1987).

ACKNOWLEDGMENT

I thank Bruce Sorrie of MNHESP for information used in this article.

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